

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

Claims 1-15 (canceled)

16. (New) A method for altering the size of a communication cell in response to bandwidth demands, said method including:

determining a first size for a first communication cell;

determining a second size for said first communication cell;

determining a bandwidth demand for at least one communication cell adjacent to said first communication cell and only for said at least one communication cell adjacent to said first communication cell; and

altering the size of said first communication cell from said first size to said second size based at least in part on said bandwidth demand.

17. (New) The method of claim 16, wherein said altering occurs dynamically.

18. (New) The method of claim 16, wherein a terminal in a communication cell adjacent to said first communication cell makes a bandwidth request,

wherein said bandwidth request has a priority level,

wherein said step of altering said size of said first communication cell is based in part on said priority level.

19. (New) The method of claim 16, wherein said second size of said first communication cell overlaps on at least one communication cell adjacent to said first communication cell.

20. (New) A method for altering the size of a communication cell in response to bandwidth demands, said method including:

determining a service area including a plurality of communication cells;
determining a first size for a first communication cell in said service area;
determining a second size for said first communication cell in said service area;
determining a bandwidth demand for at least one communication cell adjacent to said first communication cell and only for said at least one communication cell adjacent to said first communication cell,

wherein said at least one communication cell adjacent to said first communication cell includes a subset of said plurality of communication cells of said service area comprising less than all of said plurality of communication cells; and

altering the size of said first communication cell from said first size to said second size based at least in part on said bandwidth demand.

21. (New) The method of claim 20, wherein said altering occurs dynamically.
22. (New) The method of claim 20, wherein a terminal in a communication cell adjacent to said first communication cell makes a bandwidth request,
wherein said bandwidth request has a priority level,
wherein said step of altering said size of said first communication cell is based in part on said priority level.
23. (New) The method of claim 20, wherein said second size of said first communication cell overlaps on at least one communication cell adjacent to said first communication cell.
24. (New) A method for altering the size of a communication cell in response to bandwidth demands, said method including:
determining a first size for a communication cell;
determining a second size for said communication cell;
determining a bandwidth demand for said communication cell and only for said communication cell; and

altering the size of said communication cell from said first size to said second size based at least in part on said bandwidth demand, said second size of said communication cell overlapping on at least one communication cell adjacent to said communication cell.

25. (New) The method of claim 24, wherein said altering occurs dynamically.

26. (New) The method of claim 24, wherein a terminal in said communication cell makes a bandwidth request,

wherein said bandwidth request has a priority level,

wherein said altering step is based in part on said priority level.

27. (New) A communication system including:

a first communication cell having a first size and a second size; and

at least one adjacent communication cell adjacent to said first communication cell, said at least one adjacent communication cell having a bandwidth demand,

wherein said bandwidth demand is based solely on said at least one adjacent communication cell,

wherein said first communication cell changes from said first size to said second size based in part on said bandwidth demand.

28. (New) The communication system of claim 27, wherein said first communication cell dynamically changes from said first size to said second size.

29. (New) The communication system of claim 27, wherein a terminal in a communication cell adjacent to said first communication cell makes a bandwidth request, wherein said bandwidth request has a priority level, wherein said first communication cell changing from said first size to said second size is based in part on said priority level.

30. (New) The communication system of claim 27, wherein said second size of said first communication cell overlaps on at least one communication cell adjacent to said first communication cell.

31. (New) A communication system including:
a service area including a plurality of communication cells;
a first communication cell located in said service area, said first communication cell having a first size and a second size; and
at least one adjacent communication cell adjacent to said first communication cell, wherein said at least one adjacent communication cell comprises a subset of said plurality of communication cells, said subset including less than all of said service area,

wherein said at least one adjacent communication cell has a bandwidth demand,
said bandwidth demand based solely on said at least one adjacent communication cell,

wherein said first communication cell changes from said first size to said second
size based in part on said bandwidth demand.

32. (New) The communication system of claim 31, wherein said first
communication cell dynamically changes from said first size to said second size.

33. (New) The communication system of claim 31, wherein a terminal in a
communication cell adjacent to said first communication cell makes a bandwidth request,
wherein said bandwidth request has a priority level,
wherein said first communication cell changing from said first size to said second
size is based in part on said priority level.

34. (New) The communication system of claim 31, wherein said second size
of said first communication cell overlaps on at least one communication cell adjacent to
said first communication cell.

35. (New) A communication system including:
a communication cell having a first size and a second size,

wherein said first communication cell has a bandwidth demand, said bandwidth demand based solely on said first communication cell,

wherein said first communication cell changes from said first size to said second size based in part on said bandwidth demand, said second size overlapping on at least one adjacent communication cell adjacent to said communication cell.

36. (New) The communication system of claim 35, wherein said first communication cell changing from said first size to said second size occurs dynamically.

37. (New) The communication system of claim 35, wherein a terminal in said communication cell makes a bandwidth request,

wherein said bandwidth request has a priority level,

wherein said communication cell changing from said first size to said second size is based in part on said priority level.